CURRENT MONITORING/CONTROL CIRCUIT

ABSTRACT OF THE DISCLOSURE

A current control circuit that employs a magnetic amplifier and an active feedback circuit. The feedback circuit establishes the effective operating current of the amplifier at a fixed point. The magnetic amplifier includes a pair of oppositely wound gate windings, a bias winding and a control winding. The gate windings are driven by an oscillator driver that generates a gate winding current and a gate winding voltage. A reference voltage and the gate winding voltage are applied to a feedback amplifier and the feedback circuit. When the gate winding voltage becomes equal to the reference voltage, the feedback circuit is stable and the gate winding current is set to a desired zero current operating point.